

L Number	Hits	Search Text	DB	Time stamp
1	210	((prevent\$10) near10 (concept\$10 or pregnan\$10 or birth)).clm.	USPAT; US-PGPUB	2003/10/29 12:57
2	9911	folic or folate	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 12:57
3	3	((prevent\$10) near10 (concept\$10 or pregnan\$10 or birth)).clm.) and (folic or folate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:00
4	389	(folic or folate) and (contracep\$10 or birth near control) and (cervi\$5) and (cancer\$10 or dysplas\$10 or carcinom\$10)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:29
5	562	(folic or folate).clm. and 514/\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:40
6	78	(folic or folate).clm. and 514/249	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:41
7	3	((folic or folate) and (contracep\$10 or birth near control) and (cervi\$5) and (cancer\$10 or dysplas\$10 or carcinom\$10)) and 514/249	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:43
8	56	"5654011"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:44
9	0	(514/249 or folic or folate) and (514/841 or 514/843)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:45
10	172	(514/249 or 514/841 or 514/843) and (folic or folate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:46
11	0	(514/841 or 514/843) and (folic or folate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/10/29 13:46

d his ful

(FILE 'HOME' ENTERED AT 12:10:51 ON 29 OCT 2003)

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DISSABS, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ...' ENTERED AT 12:11:19 ON 29 OCT 2003

L1 15 SEA (FOLIC ACID AND PILL)/TI
D 1-15
D 15 IALL
D 10 IALL
D 14 IALL
L2 26 SEA "FOLIC ACID AND THE PILL"
L3 14 DUP REM L2 (12 DUPLICATES REMOVED)
D 1-14
D 14 IALL

FILE 'STNGUIDE' ENTERED AT 12:17:41 ON 29 OCT 2003

L4 0 SEA (FOLIC ACID OR FOLATE) AND (CONTRACEP?)

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DISSABS, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ...' ENTERED AT 12:38:34 ON 29 OCT 2003

L5 2533 SEA (FOLIC ACID OR FOLATE) AND (CONTRACEP? OR BIRTH CONTROL)
L6 1957 SEA (FOLIC ACID OR FOLATE) (L) (CONTRACEP? OR BIRTH CONTROL)
L7 1017 SEA (FOLIC ACID OR FOLATE) (1000A) (CONTRACEP? OR BIRTH CONTROL)
L8 973 SEA (FOLIC ACID OR FOLATE) (100A) (CONTRACEP? OR BIRTH CONTROL)
L9 924 SEA (FOLIC ACID OR FOLATE) (50A) (CONTRACEP? OR BIRTH CONTROL)
L10 774 SEA (FOLIC ACID OR FOLATE) (20A) (CONTRACEP? OR BIRTH CONTROL)
L11 495 SEA (FOLIC ACID OR FOLATE) (5A) (CONTRACEP? OR BIRTH CONTROL)
L12 267 DUP REM L11 (228 DUPLICATES REMOVED)
D 1-
L13 549 SEA L5 AND (CERVI? AND (CANCER? OR DYSPLAS? OR CARCINOMA?))
L14 442 DUP REM L13 (107 DUPLICATES REMOVED)
D 1-
D 439 IALL
D 438 IALL
D 436 IALL
D 435 IALL
D 434 IALL
D 433 IALL
D 432 IALL
D 431 IALL
D 430 IALL
D 429 IALL
D 428 IALL
D 426 IAL
D 425 IALL
D 422 IALL
D 421 IALL
D 418 KWIC
D 417 IALL
D 415 IALL
D 414 IALL
D 413 IALL
D 411 IALL ABEX
D 410 IALL

L14 ANSWER 411 OF 442 DRUGU COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 1992-27165 DRUGU T V

TITLE: Oral **Folic Acid** Supplementation for
Cervical Dysplasia: A Clinical Intervention
Trial.

AUTHOR: Butterworth C E Jr; Hatch K D; Soong S J; Cole P; Tamura T;
Sauberlich H E

LOCATION: Birmingham, Alabama, United States

SOURCE: Am.J.Obstet.Gynecol. (166, No. 3, 803-09, 1992) 2 Fig. 1 Tab.
24 Ref.

CODEN: AJOGAH ISSN: 0002-9378

AVAIL. OF DOC.: Department of Nutrition Sciences, University of Alabama at
Birmingham, UAB Station, Birmingham, AL 35294-3360, U.S.A. (9
authors).

LANGUAGE: English

DOCUMENT TYPE: Journal

ABSTRACT:

P.o. **folic acid** supplementation had no effect on the course
of **cervical** intraepithelial neoplasia in a randomized, double-blind,
placebo-controlled trial in 235 patients. The prevalence of human
papillomavirus type 16 infection (HPV-16) was lower in patients with the
highest levels of RBC **folate**. Oral **contraceptive** use was
80% in both groups. It is concluded that **folate** deficiency may be
involved as a cocarcinogen during the initiation of **cervical**
dysplasia, but **folic acid** supplements have no
effect on the course of established disease.

SECTION HEADING: T Therapeutics
V Vitamins

CLASSIF. CODE: 42 Vitamins
51 Chemotherapy - clinical
64 Clinical Trials

CONTROLLED TERM:

[01] **FOLATE** *TR; **CERVICAL** *TR; INTRAEPITHELIAL
*TR; **DYSPLASIA** *TR; **PAPILLOMA** *TR; **NEOPLASM** *TR;
INFECTION,VIRUS *OC; IN-VIVO *FT; CASES *FT; RANDOM *FT;
DOUBLE *FT; BLIND-TEST *FT; PLACEBO *FT; CLIN.TRIAL *FT; P.O.
*FT; SUPPLEMENTATION *FT; **PAPILLOMA-VIRUS** *FT; **ERYTHROCYTE**
*FT; CONC. *FT; DEFICIENCY *FT; **PAPOVAVIRUS** *FT; **VIRUS** *FT;
VITAMINS-B *FT; **FOLATE** *RN; TR *FT

CAS REGISTRY NO.: 59-30-3

FIELD AVAIL.: AB; LA; CT

FILE SEGMENT: Literature

ABEX Methods In a randomized, double-blind, placebo-controlled study, 235
patients (median age 25.0 yr) with grade 1 or 2 **cervical**
intraepithelial neoplasia received either 10 mg p.o. **folic**
acid or placebo (ascorbic acid) daily for 6 mth. Results
199/235 Patients completed the 6 mth trial. RBC **folate** level
increased from 224 ng/ml to 753 ng/ml after 6 mth **folate**
treatment, but was largely unchanged in the placebo group (254 ng/ml).
Folate supplementation had no effect on outcome compared with
placebo. Despite an initial abnormal Papanicolaou smear and a visible
colposcopic lesion, over 60% of patients in each group had normal biopsy
specimens at the end of 6 mth. At 6 mth, there were slightly more
positive findings (grade 1-3) among subjects with lower RBC
folate levels (32% at 290 ng/ml **folate** vs. 38% at less
than 180 ng/ml **folate**). Tabulation of biopsy results according
to initial RBC **folate** levels revealed the same distribution
pattern: 31%, 33% and 39% at high, medium and low **folate**
levels. Initially, about 30% of patients were HPV-16 positive. There

was a higher prevalence of HPV-16 infection in subjects in the upper tertile of RBC **folate** (16%, 229 ng/ml and over) compared to those in the lower tertile (37%, less than 180 ng/ml). The same pattern was observed after 6 mth but the difference was only marginally significant. (W99/DAC)

ACCESSION NUMBER: 94168364 EMBASE
DOCUMENT NUMBER: 1994168364
TITLE: Erythrocyte **folate** levels, oral
contraceptive use and abnormal **cervical**
cytology.
AUTHOR: Harper J.M.; Levine A.J.; Rosenthal D.L.; Wiesmeier E.;
Hunt I.F.; Swendseid M.E.; Haile R.W.
CORPORATE SOURCE: Department of Epidemiology, School of Public Health,
University of California, Los Angeles, CA 90024-1772, United
States
SOURCE: Acta Cytologica, (1994) 38/3 (324-330).
ISSN: 0001-5547 CODEN: ACYTAN
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
010 Obstetrics and Gynecology
LANGUAGE: English
SUMMARY LANGUAGE: English

ABSTRACT:
The initial hypothesis of this study was that **folate** depletion is a risk factor for human papillomavirus infection and **cervical** epithelial cell abnormalities, including **dysplasia**. The prevalences of low erythrocyte **folate** levels (defined as <140 ng/mL erythrocytes and determined by the growth of Lactobacillus) were measured in 250 University of California at Los Angeles students. Among oral **contraceptives** users, low erythrocyte **folate** was a risk factor for an abnormal cytologic smear in both benign atypia and squamous intraepithelial lesions. Odds ratios were statistically significant for biopsied women who did not have condyloma and for those who did not have squamous intraepithelial lesions but not for those with histologically confirmed intraepithelial lesions. Low erythrocyte **folate** was a risk factor for a positive Virapap result in oral **contraceptive** users. If the **folate** effects are causal, the findings suggest that erythrocyte **folate** levels should be higher in oral **contraceptive** users than in nonusers to protect against an abnormal cytologic smear.

CONTROLLED TERM: Medical Descriptors:
***folic acid deficiency**
***uterine cervix cytology**
adult
article
disease association
erythrocyte level
female
human
human tissue
infection risk
normal human
priority journal
risk assessment
uterine cervix carcinoma in situ
wart virus
Drug Descriptors:
***folic acid: EC, endogenous compound**
***oral contraceptive agent**
CAS REGISTRY NO.: (**folic acid**) 59-30-3, 6484-89-5

ACCESSION NUMBER: 1998:131600 SCISEARCH

THE GENUINE ARTICLE: YV745

TITLE: Can **cervical dysplasia** and **cancer** be prevented with nutrients?

AUTHOR: Giuliano A R (Reprint); Gapstur S

CORPORATE SOURCE: UNIV ARIZONA, ARIZONA PREVENT CTR, TUCSON, AZ 85724 (Reprint); UNIV ARIZONA, ARIZONA CANC CTR, TUCSON, AZ 85724; NORTHWESTERN UNIV, SCH MED, DEPT PREVENT MED, CHICAGO, IL

COUNTRY OF AUTHOR: USA

SOURCE: NUTRITION REVIEWS, (JAN 1998) Vol. 56, No. 1, Part 1, pp. 9-16.

Publisher: INT LIFE SCIENCES INST, 810 EAST 10TH ST

SUBSCRIPTION OFFICE, LAWRENCE, KS 66044.

ISSN: 0029-6643.

DOCUMENT TYPE: General Review; Journal

FILE SEGMENT: LIFE; AGRI

LANGUAGE: English

REFERENCE COUNT: 51

ABSTRACT:

Invasive **cervical cancer** accounts for 11.6% of all *****cancers***** worldwide and is the second most common **cancer** among women. It is the most common **cancer** among women living in less developed countries. Although infection with oncogenic-type human papillomaviruses (HPV) is associated with most cases of **cervical ***cancer*****, HPV infection alone is an insufficient cause of *****cervical*** cancer**. Research from the last two decades suggests a role for nutrients in the prevention of **cervical cancer**. However, results from phase III folio acid and beta-carotene chemoprevention trials have been negative. Potential reasons for the lack of treatment effect are discussed within the context of **cervical** carcinogenesis.

CATEGORY: NUTRITION & DIETETICS

SUPPL. TERM PLUS: HUMAN PAPILLOMAVIRUS INFECTION; METHYL-DEFICIENT DIETS; TRANS-RETINOIC ACID; BETA-CAROTENE; **FOLIC-ACID**; INTRAEPITHELIAL NEOPLASIA; ORAL-**CONTRACEPTIVES**; DNA METHYLATION; REGRESSION; **CARCINOMA**

REFERENCE(S):

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
ANON	1994	330	1029	NEW ENGL J MED
ADAMS R L P	1990	265	309	BIOCHEM J
AGARWAL C	1991	51	3982	CANCER RES
ANDERSON R	1990	62	27	WORLD REV NUTR DIET
BARTSCH D	1992	11	2283	EMBO J
BRIGGS M	1972	238	277	NATURE
BUTTERWORTH C E	1982	35	73	AM J CLIN NUTR
BUTTERWORTH C E	1992	166	803	AM J OBSTET GYNECOL
BUTTERWORTH C E	1992	267	528	JAMA-J AM MED ASSOC
CHIESA F	1992	28	97	ORAL ONCOL EUR J C B
CHILDERS J M	1995	4	155	CANCER EPIDEM BIOMAR
CUZICK J	1994	69	167	BRIT J CANCER
DEVET H C W	1991	44	273	J CLIN EPIDEMIOL
DURST M	1985	66	1515	J GEN VIROL
GIULIANO A R	1997	6	917	CANCER EPIDEM BIOMAR
GREENBERG E R	1990	323	789	NEW ENGL J MED
HEIMBURGER D C	1987	3	54	NUTR INT
HENNEKENS C H	1996	334	1145	NEW ENGL J MED
HERBERT V	1986	206	293	ADV EXP MED BIOL
HO G Y F	1995	87	1365	J NATL CANCER I
HONG W K	1990	323	795	NEW ENGL J MED

HSIEH L L	1989	49	3795	CANCER RES
KHAN M A	1993	53	905	CANCER RES
KIM Y I	1994	74	893	CANCER
KOUTSKY L A	1992	327	1272	NEW ENGL J MED
KURMAN R J	1994	272	1866	JAMA-J AM MED ASSOC
MCCLEROY V J	1973	26	191	AM J CLIN NUTR
MEYSKENS F L	1994	86	539	J NATL CANCER I
MITCHELL M F	1996	21	17	J NATL CANCER I
MUNOZ N	1989	94	9	IARC SCI PUBL
NIERENBERG D W	1989	130	511	AM J EPIDEMIOL
OMENN G S	1996	334	1160	NEW ENGL J MED
PALAN P R	1989	161	881	AM J OBSTET GYNECOL
PALEFSKY J M	1995	4	415	CANCER EPIDEM BIOMAR
PARKIN D M	1993	54	594	INT J CANCER
POTISCHMAN N	1996	7	113	CANCER CAUSE CONTROL
RIVERS J M	1975	258	465	ANN NY ACAD SCI
ROMNEY S L	1997	65	483	GYNECOL ONCOL
ROSL F	1993	74	791	J GEN VIROL
SAGAE S	1990	66	295	CANCER
SCHIFFMAN M H	1992	83	394	J NATL CANCER I
SCHIFFMAN M H	1995	87	1345	J NATL CANCER I
SEIFTER E	1982	68	835	J NATL CANCER I
SHINDOH M	1995	85	721	OBSTET GYNECOL
SMITH J	1987	489	144	ANN NY ACAD SCI
SPORN M B	1994	86	476	J NATL CANCER I
WAINFAN E	1988	29	145	P AM ASSOC CANC RES
WEITZMAN S	1990	9		FREE RAD BIOL MED
WHITEHEAD N	1973	226	1421	JAMA-J AM MED ASSOC
ZURHAUSEN H	1989	8	1	ADV VIRAL ONCOL
ZURHAUSEN H	1986	2	489	LANCET

L14 ANSWER 428 OF 442 CANCERLIT on STN

ACCESSION NUMBER: 81627232 CANCERLIT

DOCUMENT NUMBER: 81627232

TITLE: NEW CONCEPTS IN NUTRITION AND **CANCER**:
IMPLICATIONS FOR **FOLIC ACID**.

AUTHOR: Butterworth C E

CORPORATE SOURCE: Dept. Nutrition Sciences, Univ. Alabama, Birmingham, AL,
35294.

SOURCE: J Dent Child, (1981) 48 (4) 300-303.
ISSN: 0022-0353.

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Institute for Cell and Developmental Biology

ENTRY MONTH: 198111

ENTRY DATE: Entered STN: 19941107

Last Updated on STN: 19960517

ABSTRACT:

Many of the proposed mechanisms by which diet and nutrition may be related to
cancer seem to involve a genetic or chromosomal injury that may be
conditioned by nutritional factors such as **folic acid** (FA).
Hormone-induced localized nutrient deficiency has been postulated as a
mechanism involved in the development of **cervical dysplasia**
in women taking oral **contraceptives** (OCs). In a clinical trial, FA
supplementation led to the regression of OC-induced **cervical**
dysplasias in women who continued to take OCs. No such regression
occurred in placebo-treated women, some of whom developed **carcinoma**
in situ. The concept of nutritionally dependent fragile sites and somatic
mutations on human chromosomes is not supported by clear evidence that
chromosomal fragility is involved in carcinogenesis. However, a combination of
chromosomal fragility and deficiencies of FA or another essential nutrient may
account for specific mutations in target tissues. One published report
describes 34 cases of serious hematologic disease (including 5 acute leukemias)
in a family with an inherited defect of cellular FA uptake. **Cervical**
cancer is circumstantially linked to a DNA virus (herpesvirus), and
several RNA viruses are known to be oncogenic in animals. The retroviruses
induce RNA-directed DNA synthesis via reverse transcriptase. There is good
reason to suspect that FA-containing coenzymes play an important role in this
DNA synthesis, as they do elsewhere. Folic acid plays an important role in the
infection of *Escherichia coli* by T-even bacteriophages. FA and its analogs may
play a similar role in viral oncogenesis. (17 Refs)

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ACCESSION NUMBER: 80187077 EMBASE
DOCUMENT NUMBER: 1980187077
TITLE: **Folate** for oral **contraceptive** users may
reduce **cervical cancer** risk.
AUTHOR: Check W.A.
CORPORATE SOURCE: United States
SOURCE: Journal of the American Medical Association, (1980) 244/7
(633-634).
CODEN: JAMAAP
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:
*adverse drug reaction
*preventive medicine
*uterine cervix cancer
short survey
prevention
female genital system
oral drug administration
Drug Descriptors:
*folic acid
*oral contraceptive agent
CAS REGISTRY NO.: (folic acid) 59-30-3, 6484-89-5

L14 ANSWER 434 OF 442 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS
RESERVED. on STN

ACCESSION NUMBER: 79033607 EMBASE

DOCUMENT NUMBER: 1979033607

TITLE: **Folate**-induced regression of **cervical
dysplasia** in users of oral **contraceptive**
agents (OCA).

AUTHOR: Butterworth Jr. C.E.; Hatch K.D.; Austin Jr. J.M.; Mueller
H.

CORPORATE SOURCE: Sch. Med., Univ. Alabama, Birmingham, Ala., United States

SOURCE: Clinical Research, (1978) 26/5 (677A).

CODEN: CLREAS

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index

LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:
*clinical study
*congress report
***contraception**
***folate metabolism**
*drug therapy
***uterine cervix malformation**
abstract report
oral drug administration
major clinical study
therapy

Drug Descriptors:

***folic acid**

***oral contraceptive agent**

CAS REGISTRY NO.: (**folic acid**) 59-30-3, 6484-89-5

L3 ANSWER 14 OF 14 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4

ACCESSION NUMBER: 1973:152343 BIOSIS
DOCUMENT NUMBER: PREV197355052336; BA55:52336
TITLE: **FOLIC-ACID AND THE PILL.**
AUTHOR(S): WOOD J K; GOLDSTONE A H; ALLAN N C
SOURCE: Scandinavian Journal of Haematology, (1972) Vol. 9, No. 5,
pp. 539-544.
CODEN: SJHAAQ. ISSN: 0036-553X.

DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
CONCEPT CODE: Biochemistry studies - Vitamins 10063
Biochemistry studies - Sterols and steroids 10067
Metabolism - Water-soluble vitamins 13018
Nutrition - General studies, nutritional status and methods
13202
Nutrition - Water-soluble vitamins 13210
Digestive system - Pathology 14006
Blood - Blood cell studies 15004
Blood - Blood, lymphatic and reticuloendothelial
pathologies 15006
Blood - Lymphatic tissue and reticuloendothelial system
15008
Reproductive system - Physiology and biochemistry 16504
Endocrine - Gonads and placenta 17006
Dental biology - General and methods 19001
Pharmacology - Drug metabolism and metabolic stimulators
22003
Pharmacology - Clinical pharmacology 22005
Pharmacology - Blood and hematopoietic agents 22008
Pharmacology - Endocrine system 22016
Pharmacology - Reproductive system and implantation studies
22028
Routes of immunization, infection and therapy 22100
Toxicology - Pharmacology 22504

INDEX TERMS: Major Concepts
Blood and Lymphatics (Transport and Circulation);
Gastroenterology (Human Medicine, Medical Sciences);
Hematology (Human Medicine, Medical Sciences);
Nutrition; Pharmacology; Toxicology

INDEX TERMS: Miscellaneous Descriptors
WOMAN MEGALO BLASTIC ANEMIA ORAL CONTRACEPTIVES MAL
ABSORPTION CELIAC DISEASE DIET

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 59-30-3 (FOLIC-ACID)

D 408 IALL
D 404 IALL
D 403 IALL
D 402 IALL
D 390 IALL